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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,275	12/19/2001	Robert E. Rouquette	401521/LAITRAM	9768
23548	7590	01/25/2006	EXAMINER	
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			DEBERADINIS, ROBERT L	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,275	ROUQUETTE, ROBERT E.	
	Examiner	Art Unit	
	Robert DeBeradinis	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,10,14-25,28 and 30 is/are allowed.
- 6) ☒ Claim(s) 3-9,11-13,26,27,29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/23/02, 4/21/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed 8/23/02, 4/21/03 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The foreign documents listed on the 8/23/02 IDS, the 4/21/03 IDS and the A21 document listed on the 8/23/02 IDS were not considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 26, 27, 29 are rejected under 35 U.S.C. 102(e) as being anticipated by THIENNOT 4,840,448.

Regarding claims 26, 27, 29.

THIENNOT discloses a method of communicating data underwater comprising transmitting outbound data and inbound data through a repeater in an underwater cable; decoding the outbound data in the repeater circuit to recover clock data; and transmitting inbound data from the repeater circuit in synchronism with the clock data (abstract).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 31 rejected under 35 U.S.C. 102(b) as being anticipated by HALL 5,388,040.

Regarding claim 31.

HALL discloses an inductor; and a drive circuit including a plurality of driving transistors, a transformer coupled in parallel with the inductor, and a capacitor coupled in parallel with the transformer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over KLONTZ 5,301,096.

Regarding claims 3, 4, 5, 6.

KLONTZ teaches a method using a movable power coupling for distributing power underwater comprising: transmitting power at a first frequency on a main power line of an underwater cable; converting the power on the main power line to a second frequency, higher than the first frequency (figure 1, column 5, lines 43 plus).

KLONTZ is silent as to distributing the power at the second frequency on a plurality of power distribution lines to a plurality of devices selectively disposed along the underwater cable.

It would have been obvious to one having ordinary skill in the art at the time of this invention to have duplicated the coupling device. The motivation would have been to obviously power a plurality of devices along the underwater cable.

Regarding claims 7, 8, 9.

KLONTZ discloses submersible contactless power delivery system to deliver power to a submersible load.

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KLONTZ does not disclose a plurality of wet units; an underwater cable having the plurality of wet units selectively spaced there along and including a plurality of second inductors respectively disposed adjacent to the first inductors in the wet units; a plurality of hydrophones disposed along the underwater cable and having one or more first operating frequency bands; and a plurality of power conversion circuits respectively coupled to one or more of the second inductors to output a signal having a second operating frequency band to the wet units, wherein the first operating frequency bands and the second operating frequency band do not overlap.

It is well known in the art that a signal having a first operating frequency that is in the frequency range of the first operating frequency band and the second operating frequency band (overlap range) will exist in both bands. It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a first operating frequency band that does not overlap the second operating frequency band. The motivation would be to keep the second operating frequency from interfering with the first operating frequency.

Regarding claims 11, 12, 13.

KLONTZ teaches a contactless power distribution system is submersible to deliver power to underwater loads through clamped on or captive links attached at any location along the conductive loop.

KLONTZ does not teach the specifics of the coupler, however magnetic and capacitive coupling is well known in the art.

It would have been obvious to one having ordinary skill in the art at the time of this invention to have located and configured the inductive coupler to provide the proper coupling of power from the underwater cable to the underwater device (abstract).

Allowable Subject Matter

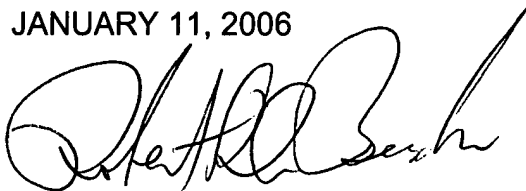
Claims 1, 2, 10, 14, 15, 16, 17, 18 19, 20, 21, 22, 23, 24, 25, 28, 30 allowed.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (571) 272-2058. The Fax phone number for this Group is (703) 872-9306.

RLD

JANUARY 11, 2006

A handwritten signature in black ink, appearing to read 'Robert L. DeBeradinis', written in a cursive style.

**ROBERT L. DEBERADINIS
PRIMARY EXAMINER**